[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1034; Directorate Identifier 2011-NM-051-AD; Amendment

39-17383; AD 2013-05-11]

RIN 2120-AA64

Airworthiness Directives; Airbus Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are superseding an existing airworthiness directive (AD) for certain Airbus Model A318, A319, A320, and A321 series airplanes. That AD currently requires one-time and repetitive inspections of specific areas and, when necessary, corrective actions for those rudders where production rework has been identified. This new AD adds airplanes with certain rudders to the AD applicability; changes an inspection type for certain reinforced rudder areas; requires pre-inspections and repairs if needed; and requires permanent restoration of vacuum loss holes. This AD also requires additional inspections for certain rudders and repair if needed, and requires replacement of certain rudders with new rudders. This AD was prompted by reports of surface defects on rudders that were the result of debonding between the skin and honeycomb core. We are issuing this AD to detect and correct extended de-bonding, which might degrade the

structural integrity of the rudder. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain other publications listed in this AD as of December 10, 2010 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)).

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1405; fax (425) 227-1149.

Discussion

SUPPLEMENTARY INFORMATION:

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the Federal Register on October 2, 2012 (77 FR 60064), and proposed to supersede

AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). That NPRM proposed to correct an unsafe condition for the specified products. The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA Airworthiness Directive 2010-0164, dated August 5, 2010 (referred to after this as "the MCAI"), to correct an unsafe condition for the specified products. The MCAI states:

Surface defects were visually detected on the rudder of one A319 and one A321 in-service aeroplane.

Investigation has determined that the defects reported on both rudders corresponded to areas that had been reworked in production. The investigation confirmed that the defects were a result of de-bonding between the skin and honeycomb core.

An extended de-bonding, if not detected and corrected, may degrade the structural integrity of the rudder. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the aeroplane.

EASA AD 2009-0141 required inspections of specific areas and, when necessary, the application of corrective actions for those rudders where production reworks have been identified.

This [EASA] AD retains the requirements of EASA AD 2009-0141 (addressing the populations of rudders affected by AOT A320-55-1038), which is superseded, and requires:

- a local ultrasonic inspection for reinforced area instead of the local thermography inspection, which is maintained for non-reinforced areas, and

- additional work performance for rudders on which this thermography inspection has been performed in the reinforced area, and
- additional work performance for some rudders on which an additional area requiring inspections is defined.

This [EASA] AD also addresses the populations of rudders affected by AOT A320-55-1039 and Airbus SB A320-55-1035, A320-55-1036 and A320-55-1037 which were not included in EASA AD 2009-0141.

Part number (P/N) D554 71000 020 00, serial number (S/N) TS-1494; and P/N D554 71002 000 00 0002, S/N TS-2212; are listed in Appendix A of the MCAI. These two items are included in this AD, because they were not listed in previous AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). This AD requires the permanent restoration of vacuum loss holes and does not allow the temporary restoration with self-adhesive patches, or temporary restoration with resin that is specified in the MCAI. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We considered the comments received.

Support for the NPRM (77 FR 60064, October 2, 2012)

United Airlines (UAL) stated that it generally agrees with the proposed requirements of the NPRM (77 FR 60064, October 2, 2012).

Request for Additional Compliance Time

UAL requested that we add "a grace period from the AD effective date" for the compliance time for the inspection specified in paragraph (y) of the NPRM (77 FR 60064, October 2, 2012). UAL stated that some rudders used in sampling inspections may be over the compliance threshold specified in paragraph (y) of the NPRM. UAL proposed an alternative method of inspection for the affected rudders.

We partially agree. We agree with adding a compliance time of 30 days after the effective date of this AD for the inspection specified in paragraph (y) of this AD. We disagree with the commenter's proposed alternate method of inspection because no justification was submitted to substantiate that this alternate inspection method would adequately address the identified unsafe condition. Under the provisions of paragraph (ff) of this AD, we will consider requests for approval of an alternate method of compliance (AMOC) if sufficient data are submitted to substantiate that an alternate inspection method would provide an acceptable level of safety.

Request to Correct Contact Information

Airbus requested that we change certain contact information. Airbus stated that paragraphs (j) and (dd) of the NPRM (77 FR 60064, October 2, 2012) should state that, for negative findings, submit the report to SEES1, Customer Services, fax +33 (0)5 61 93 36 14. Airbus also requested that we replace EAS with EIAS in paragraph (gg)(2) of the NPRM.

We agree and have changed paragraphs (j) and (dd) of this AD accordingly. We have also included the term EIAS in paragraphs (gg)(2) and (hh)(5) of this AD.

Request for Permanent Repair Approval

Airbus requested that we consider each Airbus Repair Approval Sheet (RAS) approved under Airbus Design Organization Approval (DOA) EASA.21J.031, provided to each rudder after damage is reported, as an approved method for permanent repair of rudder damage.

We agree. Airbus is an EASA delegated agent and therefore a RAS approved under Airbus Design Organization Approval (DOA) EASA.21J.031 would be method of compliance for a repair required by this AD. We have not changed this AD in this regard.

Request to Clarify Temporary Repairs

Airbus requested that we clarify why the NPRM (77 FR 60064, October 2, 2012) does not allow the temporary restoration with self-adhesive patches, or the temporary restoration with resin, which are specified in the MCAI.

We agree to clarify. Airbus All Operators Telex (AOT) A320-55A1038, Revision 02, dated September 28, 2009, does not provide specific procedures for operators to apply and inspect temporary restoration of vacuum loss inspection holes. This service information also does not specify pass/fail criteria for the detailed visual inspections associated with temporary repairs. This service information states that details of the hole restoration are provided in technical adaptations. We do not have access to technical adaptations for incorporating the technical adaptations by reference. Under the provisions of paragraph (ff) of this AD, we will consider requests for approval of an AMOC if sufficient data are submitted to specify an acceptable process for temporary repairs and that those temporary repairs would provide an acceptable level of safety. We have not changed the AD in this regard.

Additional Changes Made to this AD

In the NPRM (77 FR 60064, October 2, 2012), we included rudders P/N D554 71000 020 00, S/N TS-1494; and P/N D554 71002 000 00 0002, S/N TS-2212 in table 6 to paragraph (c) of the NPRM. In this final rule, we have specified these part/serial numbers in paragraphs (c), (aa), and (ee) of this AD, and removed table 6 to paragraph (c) of this AD.

We have also revised this final rule to change tables 4a, 4b, 5a, and 5b to figures 1, 2, 3, and 4 of this AD; we made no change to the content of those tables. These changes were made for formatting purposes only.

Conclusion

We reviewed the available data, including the comments received, and determined that air safety and the public interest require adopting the AD with the changes described previously – and minor editorial changes. We have determined that these changes:

- Are consistent with the intent that was proposed in the NPRM (77 FR 60064,
 October 2, 2012) for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM (77 FR 60064, October 2, 2012).

Costs of Compliance

We estimate that this AD will affect about 721 products of U.S. registry.

The actions that are required by AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)), and retained in this AD take about 11 work-hours per product, at an average labor rate of \$85 per work

hour. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the currently required actions on U.S. operators to be \$674,135, or \$935 per product.

We estimate that it will take about 11 work-hours per product to comply with the new basic requirements of this AD. The average labor rate is \$85 per work-hour. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$674,135, or \$935 per product.

In addition, we estimate that any necessary follow-on actions would take about 12 work-hours and require parts costing \$10,000, for a cost of \$11,020 per product. We have no way of determining the number of products that may need these actions.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and
- 4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by removing airworthiness directive (AD) 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)), and adding the following new AD:

2013-05-11 Airbus: Amendment 39-17383. Docket No. FAA-2012-1034; Directorate Identifier 2011-NM-051-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD supersedes AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)).

(c) Applicability

This AD applies to the Airbus airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this AD, certificated in any category, all serial numbers (S/N) having a rudder with a part number (P/N) and serial number listed in tables 1, 2, and 3, and figures 1 and 2, and 3 and 4 of this AD; and rudders P/N D554 71000 020 00, S/N TS-1494, and P/N D554 71002 000 00 0002, S/N TS-2212.

- (1) Model A318-111, -112, -121, and -122 airplanes.
- (2) Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes.
- (3) Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes.
- (4) Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes.

Table 1 to Paragraph (c) of this AD

Rudder P/N	Affected rudder S/N
D554 71000 010 00	TS-1069
D554 71000 010 00	TS-1090
D554 71000 012 00	TS-1227
D554 71000 014 00	TS-1350
D554 71000 014 00	TS-1366
D554 71000 014 00	TS-1371
D554 71000 014 00	TS-1383
D554 71000 014 00	TS-1387
D554 71000 016 00	TS-1412
D554 71000 018 00	TS-1443
D554 71000 018 00	TS-1444
D554 71000 018 00	TS-1468
D554 71000 020 00	TS-1480

Rudder P/N	Affected rudder S/N
D554 71000 020 00	TS-1491
D554 71000 020 00	TS-1495
D554 71000 020 00	TS-1498
D554 71000 020 00	TS-1499
D554 71000 020 00	TS-1500
D554 71000 020 00	TS-1505
D554 71000 020 00	TS-1506
D554 71000 020 00	TS-1507
D554 71000 020 00	TS-1509
D554 71000 020 00	TS-1515
D554 71000 020 00	TS-1528
D554 71000 020 00	TS-1530
D554 71000 020 00	TS-1532
D554 71000 020 00	TS-1535
D554 71000 020 00	TS-1536
D554 71000 020 00	TS-1538
D554 71001 000 00	TS-1537
D554 71001 000 00	TS-1540
D554 71001 000 00	TS-1541
D554 71001 000 00	TS-1543
D554 71001 000 00	TS-1548
D554 71001 000 00	TS-1549
D554 71001 000 00	TS-1551
D554 71001 000 00	TS-1554
D554 71001 000 00	TS-1555
D554 71001 000 00	TS-1556
D554 71001 000 00	TS-1557
D554 71001 000 00	TS-1559

Rudder P/N	Affected rudder S/N
D554 71001 000 00	TS-1562
D554 71001 000 00	TS-1563
D554 71001 000 00	TS-1564
D554 71001 000 00	TS-1565
D554 71001 000 00	TS-1566
D554 71001 000 00	TS-1567
D554 71001 000 00	TS-1568
D554 71001 000 00	TS-1569
D554 71001 000 00	TS-1570
D554 71001 000 00	TS-1573
D554 71001 000 00	TS-1575
D554 71001 000 00	TS-1578
D554 71001 000 00	TS-1579
D554 71001 000 00	TS-1580
D554 71001 000 00	TS-1581
D554 71001 000 00	TS-1582
D554 71001 000 00	TS-1584
D554 71001 000 00	TS-1593
D554 71001 000 00	TS-1594
D554 71001 000 00	TS-1596
D554 71001 000 00	TS-1599
D554 71001 000 00	TS-1603
D554 71001 000 00	TS-1609
D554 71001 000 00	TS-1621
D554 71001 000 00	TS-1626
D554 71001 000 00	TS-1627
D554 71001 000 00	TS-1635
D554 71001 000 00	TS-1637

Rudder P/N	Affected rudder S/N
D554 71002 000 00	TS-2306
D554 71002 000 00 0001	TS-2003
D554 71002 000 00 0001	TS-2005
D554 71002 000 00 0001	TS-2013
D554 71002 000 00 0001	TS-2016
D554 71002 000 00 0001	TS-2019
D554 71002 000 00 0001	TS-2020
D554 71002 000 00 0001	TS-2022
D554 71002 000 00 0001	TS-2024
D554 71002 000 00 0001	TS-2026
D554 71002 000 00 0001	TS-2031
D554 71002 000 00 0001	TS-2033
D554 71002 000 00 0001	TS-2043
D554 71002 000 00 0001	TS-2047
D554 71002 000 00 0001	TS-2048
D554 71002 000 00 0001	TS-2054
D554 71002 000 00 0001	TS-2058
D554 71002 000 00 0001	TS-2059
D554 71002 000 00 0001	TS-2064
D554 71002 000 00 0001	TS-2072
D554 71002 000 00 0001	TS-2075
D554 71002 000 00 0001	TS-2076
D554 71002 000 00 0001	TS-2079
D554 71002 000 00 0001	TS-2083
D554 71002 000 00 0001	TS-2089
D554 71002 000 00 0002	TS-2090
D554 71002 000 00 0002	TS-2095
D554 71002 000 00 0002	TS-2103

Rudder P/N	Affected rudder S/N
D554 71002 000 00 0002	TS-2116
D554 71002 000 00 0002	TS-2122
D554 71002 000 00 0002	TS-2133
D554 71002 000 00 0002	TS-2142
D554 71002 000 00 0002	TS-2147
D554 71002 000 00 0002	TS-2157
D554 71002 000 00 0002	TS-2158
D554 71002 000 00 0002	TS-2162
D554 71002 000 00 0002	TS-2167
D554 71002 000 00 0002	TS-2174
D554 71002 000 00 0002	TS-2176
D554 71002 000 00 0002	TS-2181
D554 71002 000 00 0002	TS-2189
D554 71002 000 00 0002	TS-2191
D554 71002 000 00 0002	TS-2203
D554 71002 000 00 0002	TS-2205
D554 71002 000 00 0002	TS-2207
D554 71002 000 00 0002	TS-2224
D554 71002 000 00 0002	TS-2229
D554 71002 000 00 0002	TS-2233
D554 71002 000 00 0002	TS-2241
D554 71002 000 00 0002	TS-2246
D554 71002 000 00 0002	TS-2249
D554 71002 000 00 0002	TS-2270
D554 71002 000 00 0002	TS-2275
D554 71002 000 00 0002	TS-2289
D554 71002 000 00 0002	TS-2290
D554 71002 000 00 0002	TS-2294

Rudder P/N	Affected rudder S/N		
D554 71002 000 00 0002	TS-2309		
D554 71002 000 00 0002	TS-2347		
D554 71002 000 00 0002	TS-2348		
D554 71002 000 00 0002	TS-2349		
D554 71002 000 00 0002	TS-2357		
D554 71002 000 00 0002	TS-2361		
D554 71002 000 00 0002	TS-2380		
D554 71002 000 00 0002	TS-2383		
D554 71002 000 00 0002	TS-2390		
D554 71002 000 00 0002	TS-2394		
D554 71002 000 00 0002	TS-2396		
D554 71002 000 00 0002	TS-2401		
D554 71002 000 00 0002	TS-2406		
D554 71002 000 00 0002	TS-2461		
D554 71002 000 00 0002	TS-2468		
D554 71002 000 00 0002	TS-2516		
D554 71002 000 00 0002	TS-2537		
D554 71002 000 00 0002	TS-2543		
D554 71002 000 00 0002	TS-2546		
D554 71002 000 00 0002	TS-2619		
D554 71002 000 00 0002	TS-2684		
D554 71002 000 00 0003	TS-2752		
D554 71002 000 00 0003	TS-2869		
D554 71002 000 00 0003	TS-2876		
D554 71002 000 00 0003	TS-2970		
D554 71002 000 00 0003	TS-2971		
D554 71002 000 00 0003	TS-2987		
D554 71004 000 00 0000	TS-3083		

Rudder P/N	Affected rudder S/N	
D554 71004 000 00 0000	TS-3197	

Note 1 to paragraph (c) of this AD: For table 1 to paragraph (c) of this AD, only rudder P/N D554 71000 010 00 having affected rudder S/Ns TS-1069 and TS-1090, and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227, have a core density of 24 kilogram (kg)/meters cubed (m³).

Table 2 to Paragraph (c) of this AD

Rudder P/N	Affected rudder S/N
D554-71000-014-00	TS-1278
D554-71002-000-00-0001	TS-2081
D554-71002-000-00-0002	TS-2125
D554-71002-000-00-0002	TS-2129
D554-71002-000-00-0002	TS-2160
D554-71002-000-00-0002	TS-2201
D554-71002-000-00-0002	TS-2328
D554-71002-000-00-0002	TS-2425
D554-71002-000-00-0002	TS-2511
D554-71002-000-00-0003	TS-2768
D554-71002-000-00-0003	TS-2999
D554-71002-000-00-0003	TS-3004
D554-71002-000-00-0003	TS-3051
D554-71004-000-00-0001	TS-3288

Table 3 to Paragraph (c) of this AD

Rudder P/N	Affected rudder S/N
D554-71000-008-00	TS-1032
D554-71000-010-00	TS-1092
D554-71000-014-00	TS-1314
D554-71000-018-00	TS-1445
D554-71000-020-00	TS-1520
D554-71002-000-00-0001	TS-2037
D554-71002-000-00-0002	TS-2109
D554-71002-000-00-0002	TS-2123
D554-71002-000-00-0002	TS-2124
D554-71002-000-00-0002	TS-2424
D554-71002-000-00-0002	TS-2559
D554-71002-000-00-0003	TS-3061
D554-71004-000-00-0001	TS-3694
D554-71004-000-00-0001	TS-3709
D554-71004-000-00-0002	TS-4148

Note 2 to paragraph (c) of this AD: For table 3 to paragraph (c) of this AD, only rudder P/N D554-71000-008-00 having affected rudder S/N TS-1032, and rudder P/N D554-71000-010-00 having affected rudder S/N TS-1092, have a core density of 24 kg/m³.

Figure 1 - Rudder P/N with any S/N Listed in Figure 2 of this AD

Rudder P/N with any S/N Listed in Figure 2 of this AD
D5547100000000
D5547100000200
D5547100000400
D5547100000600
D5547100000800
D5547100001000
D5547100001200
D5547100001400
D5547100001600
D5547100001800
D5547100002000
D5547100100000
D5547100200000
D5547100300000
D5547100400000

Figure 2 - Affected S/Ns for Rudders Listed in Figure 1 of this AD

Affected S/N for rudders listed in Figure 1 of this AD						
TS-1368	TS-1616	TS-2080	TS-2159	TS-2222	TS-2276	TS-2327
TS-1389	TS-1619	TS-2082	TS-2163	TS-2223	TS-2279	TS-2330
TS-1496	TS-1622	TS-2084	TS-2168	TS-2227	TS-2280	TS-2331
TS-1501	TS-1632	TS-2085	TS-2169	TS-2228	TS-2281	TS-2332
TS-1503	TS-1639	TS-2086	TS-2170	TS-2230	TS-2284	TS-2333
TS-1508	TS-2004	TS-2094	TS-2172	TS-2231	TS-2285	TS-2334
TS-1516	TS-2008	TS-2096	TS-2175	TS-2232	TS-2286	TS-2336
TS-1527	TS-2010	TS-2097	TS-2177	TS-2234	TS-2293	TS-2337
TS-1529	TS-2012	TS-2098	TS-2179	TS-2235	TS-2297	TS-2338
TS-1534	TS-2014	TS-2100	TS-2182	TS-2236	TS-2298	TS-2339
TS-1545	TS-2017	TS-2101	TS-2183	TS-2238	TS-2299	TS-2340
TS-1547	TS-2018	TS-2106	TS-2185	TS-2240	TS-2302	TS-2341
TS-1553	TS-2023	TS-2113	TS-2192	TS-2242	TS-2303	TS-2343
TS-1560	TS-2025	TS-2115	TS-2193	TS-2244	TS-2304	TS-2346
TS-1561	TS-2029	TS-2118	TS-2195	TS-2245	TS-2305	TS-2352
TS-1571	TS-2032	TS-2126	TS-2199	TS-2248	TS-2307	TS-2353
TS-1572	TS-2034	TS-2130	TS-2200	TS-2250	TS-2310	TS-2354
TS-1574	TS-2039	TS-2131	TS-2204	TS-2251	TS-2311	TS-2355
TS-1576	TS-2040	TS-2132	TS-2206	TS-2252	TS-2312	TS-2356
TS-1577	TS-2041	TS-2134	TS-2208	TS-2254	TS-2313	TS-2358
TS-1583	TS-2046	TS-2136	TS-2209	TS-2258	TS-2315	TS-2360
TS-1585	TS-2050	TS-2140	TS-2210	TS-2259	TS-2316	TS-2362
TS-1588	TS-2051	TS-2143	TS-2211	TS-2260	TS-2319	TS-2363
TS-1591	TS-2052	TS-2144	TS-2213	TS-2261	TS-2320	TS-2364
TS-1600	TS-2053	TS-2145	TS-2216	TS-2262	TS-2321	TS-2365
TS-1602	TS-2056	TS-2149	TS-2217	TS-2265	TS-2322	TS-2366
TS-1607	TS-2060	TS-2152	TS-2218	TS-2268	TS-2323	TS-2367
TS-1608	TS-2069	TS-2154	TS-2220	TS-2271	TS-2325	TS-2370

Affected S/N for rudders listed in Figure 1 of this AD						
TS-1614	TS-2070	TS-2155	TS-2221	TS-2272	TS-2326	TS-2371
TS-2372	TS-2483	TS-2583	TS-2665	TS-2743	TS-2813	TS-2878
TS-2373	TS-2484	TS-2584	TS-2666	TS-2744	TS-2814	TS-2879
TS-2374	TS-2486	TS-2585	TS-2667	TS-2745	TS-2815	TS-2880
TS-2377	TS-2488	TS-2586	TS-2668	TS-2747	TS-2816	TS-2881
TS-2381	TS-2491	TS-2587	TS-2671	TS-2749	TS-2818	TS-2882
TS-2382	TS-2493	TS-2590	TS-2674	TS-2751	TS-2819	TS-2885
TS-2387	TS-2494	TS-2591	TS-2675	TS-2753	TS-2821	TS-2886
TS-2388	TS-2498	TS-2592	TS-2676	TS-2754	TS-2822	TS-2890
TS-2392	TS-2499	TS-2593	TS-2677	TS-2755	TS-2823	TS-2891
TS-2393	TS-2501	TS-2596	TS-2679	TS-2756	TS-2824	TS-2892
TS-2395	TS-2505	TS-2597	TS-2680	TS-2757	TS-2826	TS-2893
TS-2397	TS-2506	TS-2601	TS-2681	TS-2758	TS-2827	TS-2896
TS-2398	TS-2508	TS-2602	TS-2682	TS-2759	TS-2828	TS-2897
TS-2399	TS-2510	TS-2603	TS-2683	TS-2760	TS-2830	TS-2898
TS-2407	TS-2512	TS-2605	TS-2685	TS-2762	TS-2831	TS-2899
TS-2408	TS-2514	TS-2606	TS-2688	TS-2765	TS-2832	TS-2900
TS-2409	TS-2517	TS-2611	TS-2689	TS-2771	TS-2833	TS-2903
TS-2410	TS-2518	TS-2612	TS-2691	TS-2772	TS-2834	TS-2904
TS-2411	TS-2521	TS-2614	TS-2695	TS-2773	TS-2835	TS-2906
TS-2412	TS-2522	TS-2615	TS-2697	TS-2775	TS-2836	TS-2907
TS-2415	TS-2527	TS-2616	TS-2698	TS-2776	TS-2837	TS-2908
TS-2417	TS-2529	TS-2617	TS-2699	TS-2778	TS-2838	TS-2909
TS-2421	TS-2532	TS-2620	TS-2700	TS-2779	TS-2839	TS-2910
TS-2422	TS-2536	TS-2625	TS-2701	TS-2780	TS-2840	TS-2911
TS-2423	TS-2540	TS-2626	TS-2707	TS-2782	TS-2843	TS-2913
TS-2427	TS-2544	TS-2628	TS-2710	TS-2783	TS-2844	TS-2914
TS-2428	TS-2545	TS-2629	TS-2711	TS-2784	TS-2845	TS-2916
TS-2435	TS-2547	TS-2630	TS-2712	TS-2785	TS-2846	TS-2917

Affected S/N for rudders listed in Figure 1 of this AD						
TS-2437	TS-2551	TS-2631	TS-2713	TS-2786	TS-2848	TS-2919
TS-2440	TS-2552	TS-2632	TS-2714	TS-2788	TS-2849	TS-2920
TS-2444	TS-2553	TS-2634	TS-2716	TS-2790	TS-2850	TS-2922
TS-2446	TS-2554	TS-2635	TS-2717	TS-2791	TS-2851	TS-2923
TS-2447	TS-2555	TS-2636	TS-2719	TS-2792	TS-2852	TS-2924
TS-2453	TS-2558	TS-2637	TS-2722	TS-2793	TS-2853	TS-2925
TS-2455	TS-2562	TS-2640	TS-2724	TS-2794	TS-2854	TS-2927
TS-2458	TS-2563	TS-2641	TS-2725	TS-2795	TS-2855	TS-2928
TS-2460	TS-2566	TS-2642	TS-2726	TS-2796	TS-2856	TS-2929
TS-2463	TS-2568	TS-2644	TS-2727	TS-2797	TS-2857	TS-2930
TS-2466	TS-2570	TS-2647	TS-2728	TS-2799	TS-2860	TS-2932
TS-2467	TS-2571	TS-2648	TS-2732	TS-2801	TS-2861	TS-2933
TS-2471	TS-2572	TS-2650	TS-2734	TS-2803	TS-2862	TS-2934
TS-2472	TS-2573	TS-2651	TS-2735	TS-2804	TS-2863	TS-2935
TS-2474	TS-2574	TS-2653	TS-2736	TS-2805	TS-2864	TS-2937
TS-2476	TS-2575	TS-2656	TS-2738	TS-2807	TS-2865	TS-2938
TS-2477	TS-2576	TS-2657	TS-2739	TS-2808	TS-2868	TS-2939
TS-2478	TS-2579	TS-2658	TS-2740	TS-2810	TS-2872	TS-2943
TS-2481	TS-2580	TS-2659	TS-2741	TS-2811	TS-2874	TS-2944
TS-2482	TS-2581	TS-2662	TS-2742	TS-2812	TS-2877	TS-2946
TS-2948	TS-3040	TS-3113	TS-3177	TS-3249	TS-3689	TS-3928
TS-2949	TS-3043	TS-3114	TS-3178	TS-3250	TS-3690	TS-3936
TS-2950	TS-3046	TS-3116	TS-3179	TS-3251	TS-3695	TS-3939
TS-2951	TS-3049	TS-3119	TS-3180	TS-3252	TS-3699	TS-3942
TS-2953	TS-3050	TS-3120	TS-3181	TS-3253	TS-3702	TS-3950
TS-2954	TS-3052	TS-3121	TS-3182	TS-3255	TS-3703	TS-3958
TS-2955	TS-3054	TS-3122	TS-3183	TS-3256	TS-3704	TS-3961
TS-2957	TS-3055	TS-3123	TS-3184	TS-3257	TS-3706	TS-3968
TS-2958	TS-3056	TS-3124	TS-3185	TS-3259	TS-3708	TS-3987

Affected S/N for rudders listed in Figure 1 of this AD						
TS-2959	TS-3058	TS-3125	TS-3186	TS-3262	TS-3710	TS-3993
TS-2960	TS-3060	TS-3126	TS-3188	TS-3271	TS-3717	TS-3995
TS-2962	TS-3065	TS-3127	TS-3189	TS-3276	TS-3718	TS-4003
TS-2964	TS-3066	TS-3129	TS-3191	TS-3278	TS-3734	TS-4027
TS-2965	TS-3071	TS-3131	TS-3193	TS-3282	TS-3743	TS-4031
TS-2968	TS-3072	TS-3132	TS-3194	TS-3286	TS-3761	TS-4087
TS-2969	TS-3074	TS-3133	TS-3195	TS-3289	TS-3772	TS-4099
TS-2973	TS-3075	TS-3134	TS-3198	TS-3290	TS-3780	TS-4118
TS-2976	TS-3076	TS-3135	TS-3200	TS-3291	TS-3789	TS-4145
TS-2980	TS-3077	TS-3138	TS-3201	TS-3292	TS-3805	TS-4146
TS-2984	TS-3078	TS-3139	TS-3202	TS-3295	TS-3820	TS-4147
TS-2985	TS-3079	TS-3140	TS-3204	TS-3297	TS-3821	TS-4163
TS-2986	TS-3080	TS-3141	TS-3205	TS-3306	TS-3822	TS-4167
TS-2988	TS-3081	TS-3142	TS-3207	TS-3309	TS-3824	TS-4175
TS-2991	TS-3082	TS-3143	TS-3210	TS-3310	TS-3825	TS-4178
TS-2998	TS-3084	TS-3144	TS-3215	TS-3317	TS-3839	TS-4181
TS-3001	TS-3087	TS-3145	TS-3216	TS-3320	TS-3841	TS-4186
TS-3002	TS-3088	TS-3148	TS-3217	TS-3328	TS-3843	TS-4195
TS-3003	TS-3089	TS-3149	TS-3218	TS-3388	TS-3844	TS-4212
TS-3005	TS-3090	TS-3151	TS-3219	TS-3392	TS-3846	TS-4232
TS-3006	TS-3091	TS-3154	TS-3221	TS-3395	TS-3849	TS-4271
TS-3009	TS-3093	TS-3155	TS-3222	TS-3429	TS-3850	TS-4331
TS-3011	TS-3094	TS-3156	TS-3223	TS-3441	TS-3851	TS-4345
TS-3016	TS-3096	TS-3158	TS-3224	TS-3516	TS-3853	TS-4366
TS-3018	TS-3097	TS-3159	TS-3226	TS-3561	TS-3855	TS-4396
TS-3020	TS-3098	TS-3160	TS-3227	TS-3567	TS-3857	TS-4401
TS-3021	TS-3100	TS-3161	TS-3232	TS-3574	TS-3860	TS-4420
TS-3025	TS-3101	TS-3162	TS-3234	TS-3590	TS-3862	TS-4461
TS-3026	TS-3102	TS-3164	TS-3235	TS-3591	TS-3863	TS-4480

Affected S/N for rudders listed in Figure 1 of this AD						
TS-3027	TS-3103	TS-3166	TS-3236	TS-3595	TS-3871	TS-4636
TS-3028	TS-3104	TS-3167	TS-3237	TS-3598	TS-3878	TS-4651
TS-3030	TS-3105	TS-3168	TS-3240	TS-3609	TS-3879	TS-4678
TS-3031	TS-3106	TS-3169	TS-3241	TS-3625	TS-3882	TS-4696
TS-3032	TS-3107	TS-3170	TS-3242	TS-3638	TS-3883	TS-4770
TS-3033	TS-3108	TS-3171	TS-3243	TS-3650	TS-3885	N/A
TS-3034	TS-3109	TS-3172	TS-3244	TS-3669	TS-3910	N/A
TS-3035	TS-3110	TS-3174	TS-3245	TS-3684	TS-3914	N/A
TS-3037	TS-3111	TS-3175	TS-3247	TS-3685	TS-3921	N/A
TS-3038	TS-3112	TS-3176	TS-3248	TS-3687	TS-3924	N/A

Figure 3 - Rudder P/N with any S/N Listed in Figure 4 of this AD $\,$

Rudder P/N with any S/N listed in Figure 4 of this AD
D5547100000000
D5547100000200
D5547100000400
D5547100000600
D5547100000800
D5547100001000
D5547100001200
D5547100001400
D5547100001600
D5547100001800
D5547100002000
D5547100100000
D5547100200000
D5547100300000
D5547100400000

Figure 4 - Rudder S/N with any P/N Listed in Figure 3 of this AD

Rudder S/N with any P/N listed in Figure 3 of this AD
TS-2141
TS-2269
TS-2274
TS-2295
TS-2317
TS-2664
TS-2715

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Reason

This AD was prompted by reports of surface defects on rudders that were the result of debonding between the skin and honeycomb core. We are issuing this AD to detect and correct extended de-bonding, which might degrade the structural integrity of the rudder. The loss of the rudder leads to degradation of the handling qualities and reduces the controllability of the airplane.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Retained Repetitive Inspections of Rudders with a Core Density of 24 kg/m³

This paragraph restates the requirements of paragraph (g) of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). For rudders identified in table 1 to paragraph (c) of this AD with a honeycomb core density of 24 kg/m³ (rudder P/N D554 71000 010 00 having affected rudder S/Ns TS-1069 and TS-1090, and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227), do the actions specified in paragraphs (g)(1), (g)(2), (g)(3), and (g)(4) of this AD, in accordance with Airbus All Operators Telex (AOT) A320-55A1038, Revision 01, dated June 10, 2009; or Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009; for the locations defined in the applicable AOT specified in this paragraph.

(1) Within 200 days after December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Perform a vacuum loss inspection on the rudder reinforced area.

- (2) Within 20 months after December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Perform an elasticity laminate checker (ELCH) inspection on the rudder trailing edge area. Repeat the inspection two times, at intervals not to exceed 4,500 flight cycles, but not sooner than 4,000 flight cycles after the last inspection.
- (3) Within 200 days after December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Perform an ELCH inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Repeat the inspection at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.
- (4) Within 20 months after December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Perform a vacuum loss inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations).

 Accomplishment of the action specified in paragraph (g)(4) of this AD terminates the requirements of paragraph (g)(3) of this AD.
- This paragraph restates the requirements of paragraph (h) of AD 2010-23-07,
 Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883,
 December 17, 2010)). For rudders that do not have a honeycomb core density of 24 kg/m³
 (all rudders identified in table 1 to paragraph (c) of this AD, except rudder

(h) Retained Repetitive Inspections of Rudders Without a Core Density of 24 kg/m³

P/N D554 71000 010 00 having affected rudder S/Ns TS-1069 and TS-1090, and rudder P/N D554 71000 012 00 having affected rudder S/N TS-1227), do the actions specified in paragraphs (h)(1), (h)(2), (h)(3), and (h)(4) of this AD, in accordance with Airbus AOT A320-55A1038, Revision 01, dated June 10, 2009; or Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009; for the locations defined in the applicable AOT specified in this paragraph. As of the effective date of this AD, use only Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. For this paragraph, "reference date" is defined as December 10, 2010 (the effective date of AD 2010-23-07), or the date when the rudder will accumulate 20,000 total flight cycles from its first installation on an airplane, whichever occurs later.

- (1) Within 200 days after the reference date, perform a vacuum loss inspection on the rudder reinforced area.
- (2) Within 20 months after the reference date, perform an ELCH inspection on the rudder trailing edge area. Repeat the inspection two times at intervals not to exceed 4,500 flight cycles, but not sooner than 4,000 flight cycles after the last inspection.
- (3) Within 200 days after the reference date, perform an ELCH inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Repeat the inspection at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.

(4) Within 20 months after the reference date, perform a vacuum loss inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Accomplishment of the actions specified in this paragraph terminates the requirements of paragraph (h)(3) of this AD.

(i) Retained Corrective Actions for De-bonding

This paragraph restates the requirements of paragraph (i) of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). In case of de-bonding found during any inspection required by paragraph (g) or (h) of this AD, before further flight, contact Airbus for further instructions and apply the associated instructions and corrective actions in accordance with the approved data provided, or repair the debonding using a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, or the European Aviation Safety Agency (EASA) (or its delegated agent). After the effective date of this AD, repair the debonding using only a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(j) Retained Reporting for Findings from Actions Required by Paragraphs (g) and (h) of this AD

This paragraph restates the requirements of paragraph (j) of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). At the applicable time specified in paragraph (j)(1) or (j)(2) of this AD, submit a report of the findings (both positive and negative) of each inspection required by paragraphs (g) and (h) of this AD. The report must include the inspection results, as specified in Airbus Technical Disposition TD/K4/S2/27086/2009, Issue E,

dated September 17, 2009. For positive findings, submit the report to either the Manager, Seer1/Seer2/Seer3 Customer Services, fax +33 (0)5 61 93 28 73, email region1.structurerepairsupport@airbus.com, region2.structurerepairsupport@airbus.com, or region3.structurerepairsupport@airbus.com; or AIRTAC (Airbus Technical AOG Center) Customer Services, telephone +33 (0)5 61 93 34 00, fax +33 (0)5 61 93 35 00, email airtac@airbus.com. For negative findings, submit the report to Nicolas Seynaeve, Sees1, Customer Services; telephone +33 (0)5 61 93 34 38; fax +33 (0)5 61 93 36 14; email nicolas.seynaeve@airbus.com; except, as of the effective date of this AD, only submit the report to SEES1, Customer Services, fax +33 (0)5 61 93 36 14.

- (1) For any inspection done on or after December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Submit the report within 30 days after the inspection.
- (2) For any inspection done before December 10, 2010 (the effective date of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010))): Submit the report within 30 days after December 10, 2010.

(k) Retained Inspection in Additional Areas

This paragraph restates the provisions of paragraph (k) of AD 2010-23-07,

Amendment 39-16496, ((75 FR 68181, November 5, 2010); corrected (75 FR 78883,

December 17, 2010)). All rudders that have passed the inspection specified in

paragraphs (g)(1), (g)(2), (g)(3), (g)(4), (h)(1), (h)(2), (h)(3), and (h)(4) of this AD before

December 10, 2010 (the effective date of AD 2010-23-07), in accordance with Airbus

AOT A320-55A1038, dated April 22, 2009; or Airbus Technical Disposition TD/K4/S2/27051/2009, Issue B, dated February 25, 2009; are compliant with this AD only for the areas inspected. Additional areas defined in Section 0, "Reason for Revision," of Airbus AOT A320-55A1038, Revision 01, dated June 10, 2009; or Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009; must be inspected as specified in paragraph (g) or (h) of this AD. For all areas, the repetitive inspections required by paragraph (g) or (h) of this AD remain applicable.

(1) Retained Parts Installation Limitations

This paragraph restates the requirements of paragraph (1) of AD 2010-23-07, Amendment 39-16496 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)). After December 10, 2010 (the effective date of AD 2010-23-07), no rudder listed in table 1 to paragraph (c) of this AD may be installed on any airplane, unless the rudder is inspected in accordance with paragraph (g) or (h) of this AD, as applicable, and all applicable actions specified in paragraph (i) of this AD are done.

(m) New Restoration of Vacuum Loss Holes

If no de-bonding is found during any inspection required by paragraph (g) or (h) of this AD: Before further flight, restore the vacuum loss holes by doing a permanent restoration with resin, in accordance with Note 3 of Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. Before doing the resin injection, do a local ultrasound inspection in reinforced areas, and a thermography inspection in other areas, for damage, in accordance with Note 3 of Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. If any damage is found during any inspection required by this

paragraph: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(n) New X-Ray, ELCH, Vacuum Loss, or Thermography Inspection

For rudders identified in table 2 to paragraph (c) of this AD, do the actions specified in paragraphs (n)(1) and (n)(2) of this AD, in accordance with Airbus AOT A320-55A1039, dated November 4, 2009, for the locations defined in that AOT. For this paragraph, "reference date" is defined as the effective date of this AD or the date when the rudder will accumulate 20,000 total flight cycles from its first installation on an airplane, whichever occurs later.

- (1) Within 20 months after the effective date of this AD, or within 200 days after the reference date, whichever occurs first: Perform x-ray, and/or ELCH, and/or vacuum loss, and/or thermography inspections for damage, as applicable to rudder part number and serial number, in accordance with the instructions of paragraph 4.2.2.1.1. of Airbus AOT A320-55A1039, dated November 4, 2009.
- (2) At the applicable time specified in paragraph (n)(2)(i) or (n)(2)(ii) of this AD, send the developed x-ray films and the film layout arrangement, if applicable, to Attn: SDC32 Technical Data and Documentation Services, Airbus Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; fax (+33) 5 61 93 28 06; email sb.reporting@airbus.com.
- (i) If the inspection was done on or after the effective date of this AD: Submit the x-ray films and the film layout arrangement within 10 days after the inspection.

- (ii) If the inspection was done before the effective date of this AD: Submit the x-ray films and the film layout arrangement within 10 days after the effective date of this AD.
- (3) If any damage is found during any inspection required by paragraph (n) of this AD: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(o) New ELCH Inspection, Vacuum Loss Inspection, and Repairs

For rudders identified in table 2 to paragraph (c) of this AD: Within 1,500 flight cycles or 200 days after doing the requirements of paragraph (n)(1) of this AD, whichever occurs first, do the actions specified in paragraphs (o)(1) and (o)(2) of this AD.

- (1) Perform an ELCH inspection for damage on the rudder trailing edge area, in accordance with the instructions of paragraph 4.2.2.1.2. of Airbus AOT A320-55A1039, dated November 4, 2009. In case of no finding, repeat the inspection two times, at intervals not to exceed 4,500 flight cycles but not sooner than 4,000 flight cycles after the last inspection.
- (2) Perform a vacuum loss inspection for damage of the other areas (splice/lower rib/upper edge/leading edge/other specified locations), in accordance with the instructions of paragraph 4.2.2.1.2. of Airbus AOT A320-55A1039, dated November 4, 2009.
- (3) If any damage is found during any inspection required by paragraph (o) of this AD: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(p) New Restorations/Inspections/Repairs of Certain Vacuum Loss Holes for Certain Rudders

If no damage is found during any inspection required by paragraph (o) of this AD: Before further flight, restore the vacuum loss holes by doing a permanent restoration with resin, in accordance with Note 3 of Airbus AOT A320-55A1039, dated November 4, 2009. Before doing the resin injection, do a local ultrasound inspection in reinforced areas, and a thermography inspection in other areas, for damage, in accordance with Note 3 of Airbus AOT A320-55A1039, dated November 4, 2009. If any damage is found during any inspection required by this paragraph: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(q) New Rudder Replacement for Rudders Identified in Table 3 to Paragraph (c) of this AD

For rudders identified in table 3 to paragraph (c) of this AD, do the actions specified in paragraphs (q)(1) and (q)(2) of this AD, in accordance with the instructions of Airbus AOT A320-55A1039, dated November 4, 2009, for the locations defined in that AOT. For this paragraph, "reference date" is defined as the effective date of this AD or the date when the rudder will accumulate 20,000 total flight cycles from its first installation on an airplane, whichever occurs later.

(1) For rudders identified in table 3 to paragraph (c) of this AD with a honeycomb core density of 24 kg/m³ (rudder P/N D554-71000-008-00 having affected rudder S/N TS-1032 and rudder P/N D554-71000-010-00 having affected rudder S/N TS-1092): Within 200 days after the effective date of this AD, replace the rudder with a new rudder,

in accordance with a method approved by the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(2) For rudders identified in table 3 to paragraph (c) of this AD that do not have a honeycomb core density of 24 kg/m³ (all except rudder P/N D554-71000-008-00 having affected rudder S/N TS-1032 and rudder P/N D554-71000-010-00 having affected rudder S/N TS-1092): Within 20 months after the effective date of this AD or within 200 days after the reference date, whichever occurs first, replace the rudder with a new rudder, in accordance with a method approved by the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(r) New Vacuum Loss Inspection for Reinforced Areas of Rudder Identified in Figures 1 and 2 of this AD

For rudders identified in figures 1 and 2 of this AD: At the later of the times specified in paragraphs (r)(1) and (r)(2) of this AD, perform a vacuum loss inspection on the rudder reinforced area for damage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes).

- (1) Before the rudder accumulates 17,000 total flight cycles from its first installation on an airplane without exceeding 20 months from the effective date of this AD.
 - (2) Within 200 days after the effective date of this AD.

(s) New ELCH Inspection for Rudder Trailing Edge Area

For rudders identified in figures 1 and 2 of this AD: Within 20 months after the effective date of this AD, perform an ELCH inspection for damage on the rudder trailing edge area, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). Repeat the inspection two times at intervals not to exceed 4,500 flight cycles, but not sooner than 4,000 flight cycles after the last inspection.

(t) New ELCH Inspection for Additional Rudder Areas

For rudders identified in figures 1 and 2 of this AD: At the later of the times specified in paragraphs (t)(1) and (t)(2) of this AD, perform an ELCH inspection for damage of the other areas (splice/lower rib/upper edge/leading edge/other specified locations) for damage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). Repeat the inspection thereafter at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.

- (1) Before the rudder accumulates 17,000 total flight cycles from its first installation on an airplane without exceeding 20 months from the effective date of this AD.
 - (2) Within 200 days after the effective date of this AD.

(u) New Vacuum Loss Inspection for Certain Areas of Rudders Identified in Figures 1 and 2 of this AD

For rudders identified in figures 1 and 2 of this AD: Within 20 months after the effective date of this AD, perform a vacuum loss inspection for damage of the lower rib, upper edge, leading edge, and other specified locations, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). Accomplishment of the actions specified in this paragraph terminates the requirements of paragraph (t) of this AD.

(v) New Corrective Actions for Certain Inspections

In case of damage found during any inspection required by paragraph (r), (s), (t), or (u) of this AD: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(w) New Restorations/Inspections/Repairs of Certain Vacuum Loss Holes for Certain Other Rudders

If no damage is found during any inspection required by paragraph (r) or (u) of this AD: Before further flight, restore the vacuum loss holes by doing a permanent restoration with resin, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). Before doing the resin injection, do a local ultrasound inspection in reinforced areas, and a thermography inspection in other areas, for damage, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). If any damage is found during any inspection required by this paragraph: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(x) Credit for Certain Previous Actions

This paragraph provides credit for the inspections required by paragraphs (r), (s), (t), (u), and (w) of this AD only for the inspected area for rudders identified in figures 1 and 2 of this AD, if the area passed the inspection before the effective date of this AD using Airbus Service Bulletin A320-55-1035, dated February 17, 2010 (for Model A320

series airplanes); Airbus Service Bulletin A320-55-1036, dated February 17, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, dated February 17, 2010 (for Model A319 series airplanes); which are not incorporated by reference in this AD. For all other inspected areas, the repetitive inspections required by paragraph (s), (t), and (w) of this AD are still required.

(y) New ELCH Inspection and Repairs for Certain Rudders

For rudders identified in figures 3 and 4 of this AD: Within 4,500 flight cycles but not sooner than 4,000 flight cycles after the sampling inspection, or within 30 days after the effective date of this AD, whichever occurs later, perform an ELCH inspection for damage on the rudder trailing edge area, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010 (for Model A319 series airplanes). Repeat the inspection within 4,500 flight cycles, but not sooner than 4,000 flight cycles after the last inspection. If any damage is found during any inspection required by paragraph (y) of this AD: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(z) Credit for Certain Other Previous Actions

This paragraph provides credit for the inspection required by paragraph (y) of this AD only for the inspected area for rudders identified in figures 3 and 4 of this AD if the area passed the inspection before the effective date of this AD using Airbus Service

Bulletin A320-55-1035, dated February 17, 2010 (for Model A320 series airplanes); Airbus Service Bulletin A320-55-1036, dated February 17, 2010 (for Model A318 and A321 series airplanes); or Airbus Service Bulletin A320-55-1037, dated February 17, 2010 (for Model A319 series airplanes); which are not incorporated by reference in this AD. For all inspection areas, the repetitive inspections required by paragraph (y) of this AD are still required.

(aa) New Repetitive Inspections of Certain Rudders

For rudders P/N D554 71000 020 00, S/N TS-1494; and P/N D554 71002 000 00 0002, S/N TS-2212: Do the actions specified in paragraphs (aa)(1), (aa)(2), (aa)(3), and (aa)(4) of this AD, in accordance with Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. For this paragraph, "reference date" is defined as the date when the rudder will accumulate 20,000 total flight cycles from its first installation on an airplane.

- (1) Within 200 days after the reference date, perform a vacuum loss inspection on the rudder reinforced area.
- (2) Within 20 months after the reference date, perform an ELCH inspection on the rudder trailing edge area. Repeat the inspection two times at intervals not to exceed 4,500 flight cycles, but not sooner than 4,000 flight cycles, after the last inspection.
- (3) Within 200 days after the reference date, perform an ELCH inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations). Repeat the inspection at intervals not to exceed 1,500 flight cycles or 200 days, whichever comes first.

(4) Within 20 months after the reference date, perform a vacuum loss inspection of the other areas (splice/lower rib/upper edge/leading edge/other specified locations).

Accomplishment of the actions specified in this paragraph terminates the requirements of paragraph (h)(3) of this AD.

(bb) New De-bonding Corrective Actions

In case of de-bonding found during any inspection required by paragraph (aa) of this AD: Before further flight, contact Airbus for further instructions and apply the associated instructions and corrective actions in accordance with the approved data provided.

(cc) New Restoration of Vacuum Loss Holes

If no de-bonding is found during any inspection required by paragraph (aa) of this AD: Before further flight, restore the vacuum loss holes by a permanent restoration with resin, in accordance with Note 3 of Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. Before doing the resin injection, do a local ultrasound inspection in reinforced areas, and a thermography inspection in other areas, for damage, in accordance with Note 3 of Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. If any damage is found during any inspection required by this paragraph: Before further flight, repair the damage using a method approved by either the Manager, International Branch, ANM-116; or the EASA (or its delegated agent).

(dd) New Reporting for Paragraphs (n), (o), (r), (s), (t), (u), (y), and (aa) of this AD

At the applicable time specified in paragraph (dd)(1) or (dd)(2) of this AD, submit a report of the findings (both positive and negative) of each inspection required by paragraphs (n), (o), (r), (s), (t), (u), (y), and (aa) of this AD. The report must include the

inspection results, as specified in Airbus Technical Disposition TD/K4/S2/27086/2009, Issue E, dated September 17, 2009. For positive findings, submit the report to either the Manager, Seer1/Seer2/Seer3 Customer Services, fax +33 (0)5 61 93 28 73, email region1.structurerepairsupport@airbus.com, region2.structurerepairsupport@airbus.com, or region3.structurerepairsupport@airbus.com; or AIRTAC (Airbus Technical AOG Center) Customer Services, telephone +33 (0)5 61 93 34 00, fax +33 (0)5 61 93 35 00, email airtac@airbus.com. For negative findings, submit the report to SEES1, Customer Services, fax +33 (0)5 61 93 36 14.

- (1) For any inspection done on or after the effective date of this AD: Submit the report within 10 days after the inspection.
- (2) For any inspection done before the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

(ee) New Parts Installation Limitation

As of the effective date of this AD, no rudder listed in table 1, 2, or 3 of this AD; or figure 1, 2, 3, or 4 of this AD; or a rudder identified in paragraph (ee)(1) or (ee)(2) of this AD; may be installed on any airplane, unless the rudder is in compliance with the requirements of this AD.

- (1) P/N D554 71000 020 00; S/N TS-1494.
- (2) P/N D554 71002 000 00 0002; S/N TS-2212.

(ff) Other FAA AD Provisions

The following provisions also apply to this AD:

- (1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Sanjay Ralhan, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1405; fax (425) 227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.
- (2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.
- (3) **Reporting Requirements:** A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork

Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing, and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(gg) Related Information

(hh) Material Incorporated by Reference

- (1) Refer to MCAI EASA Airworthiness Directive 2010-0164, dated August 5, 2010, for related information.
- (2) Service information identified in this AD that is not incorporated by reference may be obtained at the addresses specified in paragraph (hh)(5) and (hh)(6) of this AD.
- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
- (3) The following service information was approved for IBR on [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

- (i) Airbus All Operators Telex (AOT) A320-55A1038, dated April 22, 2009. The first page of this document contains the document number and date; no other pages contain this information.
- (ii) Airbus AOT A320-55A1039, dated November 4, 2009. The first page of this document contains the document number and date; no other pages contain this information.
 - (iii) Airbus Service Bulletin A320-55-1035, Revision 01, dated July 2, 2010.
 - (iv) Airbus Service Bulletin A320-55-1036, Revision 01, dated July 2, 2010.
 - (v) Airbus Service Bulletin A320-55-1037, Revision 01, dated July 2, 2010.
- (vi) Airbus Technical Disposition TD/K4/S2/27051/2009, Issue B, dated February 25, 2009.
- (4) The following service information was approved for IBR on December 10, 2010 ((75 FR 68181, November 5, 2010); corrected (75 FR 78883, December 17, 2010)).
- (i) Airbus AOT A320-55A1038, Revision 01, dated June 10, 2009. The first page of this document contains the document number, revision level, and date; no other pages contain this information.
- (ii) Airbus AOT A320-55A1038, Revision 02, dated September 28, 2009. The first page of this document contains the document number, revision level, and date; no other pages contain this information.
- (iii) Airbus Technical Disposition TD/K4/S2/27086/2009, Issue E, dated September 17, 2009. The first page of this document contains the document number, revision level, and date; no other pages contain this information.

(5) For service information identified in this AD, contact Airbus, Airworthiness

Office – EIAS, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone
+33 5 61 93 36 96; fax +33 5 61 93 44 51; email account.airworth-eas@airbus.com;

Internet http://www.airbus.com.

(6) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(7) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Renton, Washington, on March 1, 2013.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2013-14698 Filed 06/20/2013 at 8:45 am; Publication Date: 06/21/2013]